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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Roman Stauch

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EXAMINER

SIGLER, JAY R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,862	Applicant(s) STAUCH, ROMAN	
	Examiner JAY R. SIGLER	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 18-20 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 18-20 and 23-30 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 1 states a “motor element, with downstream gear” while the specification states a “motor element and, if appropriate, upstream gear”.
2. Claim 19 is objected to because of the following informalities: “a radial through-openings” should be --radial through-openings--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 18-20 and 23-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 18-20, 23, and 25 are dependent on a cancelled claim. Therefore, it is unclear what limitations are included in the inventions of claims 18-20, 23, and 25. For further examination, claims 18-20, 23, and 25 will be considered dependent on claim 15.
6. Claim 29 recites the limitation "in the guide slot" in line 4. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 30 recites the limitation "in the guide slot" in line 16. There is insufficient antecedent basis for this limitation in the claim.
8. Claims 24 and 26-28 are dependent on unclear claims and are therefor unclear.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 15, 18, 20, 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgart et al. (U.S. Patent 5,976,138) in view of Baumgart et al. (Clinical Orthopaedics 1997).

a. Concerning claim 15, in U.S. Patent 5,976,138, Baumgart et al. teaches a device for lengthening bones (Figures 1 through 8), comprising at least two elements (see Figure 2) which can be moved relative to one another, and including at least one locking element (taken to be embodied by part 20 and 81 together) axially movable in or along a guide element 10. U.S. Patent 5,976,138 discloses means (18, as a rotational actuator, and 30, as a threaded rod) for moving the at least one locking element in or along the guide element. U.S. Patent 5,976,138 discloses means comprising at least one drive unit (18, as a rotational actuator, and 30, as a threaded rod). U.S. Patent 5,976,138 discloses the spindle element comprises a threaded rod 30 which passes through the at least one locking element (taken to be embodied by part 20 and 81 together) and engages with the at least one lock (see Figure 2).

U.S. Patent 5,976,138 does not disclose a motor element, with a downstream gear and control unit as the drive unit.

Clinical Orthopaedics 1997 discloses a bone lengthening device that uses a motor drive with a gear and spindle mechanism (see page 136, Materials and Methods, The Nail) and a control unit (taken to be embodied by the antenna used to control the motor) because it combines the advantages of using an internal bone device (taken to be embodied by a nail) with those of an implantable source of power (see page 136, 3rd paragraph). It would have been obvious to someone of ordinary skill in the art at the time of the invention to use a geared motor drive suggested by Clinical Orthopaedics 1997 with the invention of U.S. Patent 5,976,138 in order to combine the advantages of using an internal bone device with those of an implantable source of power. Additionally, Clinical Orthopaedics 1997 suggests a motor drive with a gear and spindle mechanism and a control unit as a known drive unit to someone of ordinary skill in the art at the time of the invention. It would have been within the skill of someone of ordinary skill in the art at the time of the invention to select a motor drive with a gear and spindle mechanism and a control unit as a suitable drive unit.

- b. Concerning claim 18, U.S. Patent 5,976,138 teaches the guide element 10 has an elongate, continuous guide slot 16.
- c. Concerning claim 20, U.S. Patent 5,976,138 teaches the guide element 10 comprises, at one end, a receiving opening (see Figure 2 and 4) for the reception and engagement of a drive unit.
- d. Concerning claim 24, U.S. Patent 5,976,138 teaches the locking element (20 and 81) comprises a rectangular cross section (as seen in Figure 2) and

engages at least partially over an outside of the guide slot of the guide element (bolt 81, which is taken to be part of the locking element, is seen over an outside of the guide slot 16 of the guide element 10 in Figures 6 through 8).

e. Concerning claim 27, U.S. Patent 5,976,138 teaches the drive unit 18 is pushed axially into the receiving opening (seen in Figure 2), and a motor (taken to mean one that imparts motion, (1997). In *Merriam-Webster's Collegiate Dictionary*. Tenth Edition) element 18 is fitted against rotation in the guide element 10 (Column 5, Lines 53-59; taken to be embodied by actuator 18 attached to the abutment; attached taken to mean to join, fasten, or connect, (2000). In *Collins English Dictionary*. Retrieved September 19, 2007, from <http://www.credoreference.com/entry/2619187>) in the area of the receiving opening (seen in Figure 2).

f. Concerning claim 28, U.S. Patent 5,976,138 teaches at one end of the guide element, there is a recess (taken to be embodied by the groove on the surface of the 10, 18, or 20; recess. 1992. In *Academic Press Dictionary of Science and Technology*. Retrieved September 17, 2007, from <http://www.credoreference.com/entry/3150051>) for, or alternatively capable of, bearing a spindle element 30.

g. Concerning claim 29 and 30, while U.S. Patent 5,976,138, in view of Clinical Orthopaedics 1997, does not suggest having a second locking element, adding a second locking element is considered mere duplication of a part. It would have been obvious to one having ordinary skill in the art at the time the

invention was made to add an additional locking element to the modified invention of U.S. Patent 5,976,138, in view of Clinical Orthopaedics 1997, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ. *Note:* the limitation of the locking elements being driven toward or away from one another is considered functional and would have been within the skills of someone of ordinary skill in the art.

11. Claim 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgart et al. (U.S. Patent 5,976,138) in view of Baumgart et al. (Clinical Orthopaedics 1997) as applied to claim 15 above, and further in view of Muschler et al. (U.S. Patent 5,626,579). U.S. Patent 5,976,138, in view of Clinical Orthopaedics 1997, fairly suggests the claimed invention except for the guide element comprising, at each end, radial through-openings. Muschler et al. also teaches the guide element comprises, at each end, a radial through-openings (see Figure 1A, where parts 33 go through the guide element 32) in order to attach the guide element to the bone at both ends (see Figure 1A). It would have been obvious to someone of ordinary skill in the art at the time of the invention to have radial through openings at both ends of the guide element in the modified invention of U.S. Patent 5,976,138, in view of Clinical Orthopaedics 1997 and Muschler et al., in order to attach the guide element to the bone at both ends.

Response to Arguments

12. Applicant's arguments filed 21 January 2008 have been fully considered but they are not persuasive. The language "at least one locking element" does not contain any

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structural limitations other than there must be at least one. The language "locking" is considered functional and met by the prior art (see U.S. Patent 5,976,138, Fig. 6-8; the element is locking into the bone piece).

Allowable Subject Matter

13. The indicated allowability of claim 29 is withdrawn in view of the new interpretation of the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAY R. SIGLER whose telephone number is (571)270-3647. The examiner can normally be reached on Monday through Thursday from 8 AM to 4 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. S./
Examiner, Art Unit 3733
/Eduardo C. Robert/
Supervisory Patent Examiner, Art Unit 3733